**Dept of Energy Resources** 

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Re: Comments regarding Study on Forest Sustainability and Carbon Policy by William Kropelin, Chief Forester, Burlington Electric – McNeil Generating Station, Burlington, Vermont.

I am Chief Forester at J.C. McNeil Generating Station (McNeil) in Burlington, VT. McNeil is a 50 MW wood-fired electrical generating station that has been in operation since 1983. My responsibilities include the sustainable procurement of approximately 400,000 green tons of forest harvesting residue, mill residue and clean urban wood waste per year. McNeil's wood procurement activities are conducted in accordance with strict conditions of a Certificate of Public Good issued by the Vermont Public Service Board including harvest plan review by the VT Department of Fish and Wildlife, harvest monitoring by professional foresters, use of Acceptable Management Practices to control soil erosion, and protection of critical wildlife habitats.

I have read the Manomet Study with interest and wish to share some impressions based on my 30 plus years of experience in the wood procurement and biomass harvesting field. It is apparent that MA DOER retained an organization with little to no direct wood procurement experience to conduct this study. The Manomet Study took a very conservative view of wood availability. The main focus was on harvest residue from existing harvests, but assumes that no additional harvesting is likely at current biomass prices. The Study fails to consider that landowners may find the cleaner job that results from harvest of logging residues is an incentive to manage lands that prior to the advent of biomass harvesting, were not managed because of the mess left after conventional logging operations. I find that many landowners, from maple syrup producers, to cross country skiers, appreciate the reduced volume of slash that biomass harvests create. The biomass harvesting option will encourage more landowners to manage their lands and the logging residues resulting from this management activity will be available for biomass fuel.

The study gave hardly any consideration of the volume of wood potentially available from three other sources: sawmill residues, land-clearing and urban waste wood. These latter sources have proven to be significant in McNeil's case; up to 25% of our annual wood fuel requirements are met by these sources, and likely could be significant in MA as well.

The Study report indicates correctly that most sawmill residues are currently utilized. The study gives no consideration to the likelihood of some portion of these materials being diverted to new biomass markets. The Study suggests that current biomass prices would be inadequate to interest mill residue suppliers to divert their product to biomass. My experience has been that mill operators are eager to take advantage of shorter haul distances provided by local biomass markets. Diversion of mill residues to closer biomass markets result in lower vehicle emissions, as well as reduced transportation and labor costs for the mills which compensate for lower biomass pricing.

Massachusetts has the unfortunate distinction of hosting unwanted infestations of at least two aggressive and exotic insect pests; the Asian Long-horned Borer and the Hemlock Wooly Adelgid. Control efforts are currently resulting in significant volumes of wood chips requiring disposal by burning. Much of this material is being sold to out-of-state markets. The need for salvage efforts of this nature are somewhat unpredictable, but likely to be part of our forests future for some time. This material not only would provide usable biomass fuel for MA-based users, but the biomass consumption would be a public service resulting in lower insect control costs. This wood source was totally ignored by the study.

The study found that considerably more biomass would be available at higher stumpage prices. My interviews with loggers about the recent (and currently inactive) federal Biomass Crop Assistance Program, indicate that the program resulted in approximately a doubling of stumpage prices paid by most biomass harvesters. This increase of only \$1-2 per ton resulted in considerably more biomass availability. The Study ignored any stumpage differential effects between \$2 and \$20 per ton but it does indicate that there is a current range of total biomass prices paid between \$25 -30 per ton. There is ample opportunity to enhance biomass availability by increasing stumpage \$1-2 without increasing the total cost of biomass. The study under-estimated biomass availability yet again.

## **Recommendations**

I recommend that MA DOER give greater consideration to the availability of biomass:

- a. From land-clearing, particularly with anticipation toward enhanced economic development activity as our nation grows out of recession.
- b. From mill residues based on shorter hauling distances to proposed biomass facility sites.
- c. From landowners if presented with education about the option of safely removing logging slash through biomass harvesting.
- d. Through enhanced biomass harvesting and transportation infrastructure by government or biomass consumer-sponsored equipment loans to harvesters.
- e. Through biomass consumer-sponsored wood procurement standards instead of legislation.

Thank you.

William Kropelin